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## WHAT IS CLAIMED IS:

1. A method of treating a subject suffering from a herpes virus infection or a disease arising from a herpes virus infection comprising:

administering to the subject a therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.

- 2. The method of claim 1 in which said disease is malaise, fever, chills, rhinitis, diarrhea, atopic eczema, encephalitis, keratoconjunctivitis, pharyngitis, gingivostomatitis, herpetic hepatitis, recurrent orofacial mucocutaneous lesions or herpes labialis, chicken pox skin sores, erythema multiforme, idiopathic burning mouth, aphthous ulceration, Behcet's syndrome, or combinations thereof.
- 3. The method of claim 1 in which said disease is mononucleosis, Burkitt's lymphoma, primary effusion lymphomas, multiple myeloma, angioimmunoblastic lymphadenopathy, Castleman's disease, acquired immune deficiency syndrome (AIDS)related lymphoma, post-transplantation lymphoproliferative disease, Hodgkin's disease, T-cell lymphomas, oral hairy leukoplakia, lymphoproliferative disease, lymphoepithelial carcinoma, body-cavity-based lymphoma or B-cell lymphomas, non-keratinising carcinoma, squamous cell nasopharyngeal carcinoma, kidney transplant-associated epithelial tumors, malignant mesothelioma, angiosarcoma, Kaposi's sarcoma, angiolymphoid hyperplasia, prostatic neoplasm, cervical cancer, neoplasms of the vulva, retinoblastoma, Li-Fraumeni syndrome, Gardner's syndrome, Werner's syndrome, nervoid basal cell carcinoma syndrome, neurofibromatosis type 1, or combinations thereof.

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- 4. The method of claim 1 in which said disease is polyneuropathy, motor neuropathy, sensory neuronopathy, polyradiculoneuropathy, autonomic neuropathy, focal or multifocal cranial neuropathy, radiculopathy, plexopathy resulting from tumor infiltration, or combinations thereof.
  - 5. The method of claim 1 in which the substance comprises AAT.
- 6. The method of claim 5 in which the AAT is substantially purified from a wild type, mutant, or transgenic mammalian source.
- 7. The method of claim 5 in which the AAT is isolated from a culture of wild type, mutant, or transformed cells.
- 8. The method of claim 1 in which the herpes virus comprises a virus selected from the group consisting of herpes simplex virus type I (HSV-1), herpes simplex virus type II (HSV-2), cytomegalovirus (CMV), Epstein-Barr virus (EBV), varicella zoster virus (VZV), herpes zoster virus, human herpes virus type V (HHV-5), human herpes virus type VI (HHV-6), human herpes virus type VIII (HHV-8), and combinations thereof.
- 9. The method of claim 1 in which the substance comprises a compound selected from substituted oxadiazole, thiadiazole, triazole peptoids, phenylenedialkanoate esters, tetrazole, guanidinobenzoic acid, phenylsulfonylamide, sulfide, sulfoxide, sulfone amidino, amidinophenol, or derivatives thereof.
- 10. The method of claim 1 in which the substance comprises a peptide of the general formula:  $N_T$ - $X_1$ - $X_2$ - $X_3$ - $X_4$ - $X_5$ - $C_T$  or a physiologically acceptable salt thereof, in which  $N_T$  comprises an amino acid residue positioned at the peptide's N-terminal end, including C, an acetyl group, or a succinyl group, provided that  $N_T$  can also be absent;  $X_1$

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comprises an amino acid residue, including F or A;  $X_2$  comprises an amino acid residue, including C, V, L, M, I, A, C, or S;  $X_3$  comprises an amino acid residue, including F, A, V, M, L, I, Y, or C;  $X_4$  comprises an amino acid residue, including L, A, F, I, V, M, C, G, or S;  $X_5$  comprises an amino acid residue, including M, A, I, L, V, F, or G; and  $C_T$  comprises an amino acid residue positioned at the peptide's C-terminal end, including C, an amide group, a substituted amide group, or an ester group, provided that  $C_T$  can also be absent, and in which the amino acid residue can be either an L- or a D-stereoisomeric configuration.

- 11. The method of claim 1 in which the therapeutically effective amount of the substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity is in the range of about 1  $\mu$ g per kg to about 100 mg per kg of body weight of the mammalian subject.
- 12. The method of claim 1 in which the therapeutically effective amount of the substance is administered systemically or topically.
- 13. The method of claim 1 in which said herpes virus infection is one of a mucosa and is selected from an infection of the oral soft tissues, middle ear, gastrointestinal tract, urogenital tract, airway/lung tissue, eye, peritoneal membranes, or combinations thereof.
- 14. The method of claim 13 in which the substance is administered topically to said mucosa.
  - 15. The method of claim 1 in which the substance is (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(2-phenylethyl)-

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1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(2-methoxybenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(trifluoromethyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(methyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(benzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(benzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(2,6-difluorobenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(2,6-difluorobenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-styryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-styryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-styryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-styryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide;

Trifluoro methylstyryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide;

(Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-4-Methoxystyryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(3-Thienylmethyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(Phenyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; and (Benzyloxycarbonyl)-L-

(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-4-

Prolinamide, Benzyloxycarbonyl-L-valyl-N-[1-(2-[5-(3-methylbenzyl)-1,3,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide, Benzyloxycarbonyl-L-valyl-N-[1-(2-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

Valyl-N-[1-(3-(5-(3-Phenylpropyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-

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Benzyloxycarbonyl-L-valyl-N-[1-(2-(5-(methyl)-1,3,4-oxadiazoly]carbonyl)- 2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-N-[1-(2-(5-(3-trifluoromethylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(2-(5-(4-Dimethylamino benzyl)-1,3,4-

oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-

- N-[1-(2-(5-(1-napthylenyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-[1-(3-(5-(3,4-methylenedioxybenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-dimethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-dimethoxybenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-ditrifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-methylbenzyl)-1,2,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide;
- (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(biphenylmethine)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(4-phenylbenzyl)-1,2,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;
- phenoxybenzyl)-1,2,4-oxadiazolyl ]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

  (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(cyclohexylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-trifluoromethyldimethylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-

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- (S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(1-napthylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-pyridylmethyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-
- diphenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

  (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(4-dimethylaminobenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

  [(Benzyloxycarbonyl)amino]-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)- (S)-2
  - methylpropyl]acetamide; 2-(5-Amino-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(5-[(Benzyloxycarbonyl)amino]-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-(S)-2-methylpropyl]acetamide; 2-(5-Amino-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-methylpropyl]acetamide; (Pyrrole-2-carbonyl)-N-(benzyl)glycyl-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (Pyrrole-2-carbonyl)-N-(benzyl)glycyl-N-[1-(3-(5-(3-trifluoromethylbenzyl))]-1,2,4-oxadiazolyl)-
  - 4-one-carbonyl -N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-(R,S)-2-methylpropyl]amide; BTD-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (R,S)-3-Amino-2-oxo-5-phenyl-1,4,-benzodiazepine-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide;

(S)-methylpropyllamide: (2S.5S)-5-Amino-1,2,4,5,6,7-hexahydroazepino-[3,2,1]-indole-

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(Benzyloxycarbonyl)-L-valyl-2-L-(2,3-dihydro-1H-indole)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (Benzyloxycarbonyl)-L-valyl-2-L-(2,3-dihydro-1H-indole)-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; Acetyl-2-L-(2,3-dihydro-1H-indole)-

N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; 3-

- (2-(5-(3-methylbenzyl)-1,3, 4-oxadiazolyl]carbonyl)-2-(R,S)-methylpropyl]acetamide; 6-[4-Fluorophenyl]- ε-lactam-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-Phenyl-4-oxothiazolidin-3-yl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-phenyl-4-oxothiazolidin-3-yl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl]-N-[1-(3-(3-methylbenzyl)-1,3,4-oxadiazolyl]-N-[1-(3-(
- oxadiazolyl]hydroxymethyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-Benzyl-4-oxothiazolidin-3-yl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-acetamide; 2-(2-(R,S)-Benzyl-4-oxothiazolidin-3-yl oxide]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2- (R,S,)-methylpropyl]acetamide; (1-Benzoyl-3,8-quinazolinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-
- oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; (1-Benzoyl-3,6-piperazinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; (1-Phenyl-3,6-piperazinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; [(1-Phenyl-3,6-piperazinedione)-

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N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4 -oxadiazolyl]carbonyl)]-2-(S)-methylpropyl]acetamide; 3-[(Benzyloxycarbonyl)amino]-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-[(Benzyloxycarbonyl)amino]-7-piperidinyl-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-

1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-(Carbomethoxy-quinolin-

- 2-one-N-[1-(2-(5-(3-methybenzyl)-1,3,4-oxadiazoly l]carbonyl)-2-(S)-methylpropyl]acetamide; 3-(Amino-quinolin-2-one)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-[(4-Morpholino)aceto]amino-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1, 3,4-oxadiazolyl]carbonyl)-2-(S)-
- methylpropyl]acetamide; 3,4-Dihydro-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-(4-fluorobenzylidene) piperazine-2,5-dione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-(4-dimethylamino benzylidene)piperazine-2,5-dione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-

methylpropyl]acetamide; 1-Acetyl-3-(4-carbomethoxy benzylidene)piperazine-2,5-dione-

N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-[(4-pyridyl)methylene]piperazine-2,5-dione-N-[1-(2-(5-(3-methyl benzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(R)-benzyl-piperazine-2,5,-dione]-N-[1-(2-[5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-benzyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3(R)-benzylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-

oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-

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benzylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-benzyl piperazine-2,5,-dione]-N-[1-(3-(5-(2-dimethylaminoethyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Methyl-3-(R,S)-phenylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)methylpropyl]acetamide; 4-[[-Methyl-3-(R,S)-phenyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-(4-Morpholino ethyl)3-(R)-benzyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(R,S)-Phenyl-2,4imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-10 methylpropyllacetamide; 5-(R)-Benzyl-2,4-imidazolidinedione-N-[1-(2-(5-(3methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(S)-Benzyl-2,4-imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)methylpropyl]acetamide; 5-(S)-Benzyl-2,4-imidazolidinedione-N-[1-(3-(5-(3trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(R)-Benzyl-2,4-imidazolidinedione-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Benzyl-4-(R)-benzyl-2,5imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)methylpropyl]acetamide; and 1-Benzyl-4-(R)-benzyl-2,5-imidazolidinedione-N-[1-(3-(5-(3-trifluoromethyl benzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide, or mixtures thereof.

16. A pharmaceutical composition for the treatment of a herpes virus infection, which comprises a peptide of the general formula: N<sub>T</sub>-X<sub>1</sub>-X<sub>2</sub>-X<sub>3</sub>-X<sub>4</sub>-X<sub>5</sub>-C<sub>T</sub> or a

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physiologically acceptable salt thereof, in which N<sub>T</sub> comprises an amino acid residue positioned at the peptide's N-terminal end, including C, an acetyl group, or a succinyl group, provided that N<sub>T</sub> can also be absent; X<sub>1</sub> comprises an amino acid residue, including F or A; X<sub>2</sub> comprises an amino acid residue, including C, V, L, M, I, A, C, or S; X<sub>3</sub> comprises an amino acid residue, including F, A, V, M, L, I, Y, or C; X<sub>4</sub> comprises an amino acid residue, including L, A, F, I, V, M, C, G, or S; X<sub>5</sub> comprises an amino acid residue, including M, A, I, L, V, F, or G; and C<sub>T</sub> comprises an amino acid residue positioned at the peptide's C-terminal end, including C, an amide group, a substituted amide group, or an ester group, provided that C<sub>T</sub> can also be absent, and in which the amino acid residue can be either an L- or a D-stereoisomeric configuration.

- 17. A method of treating a mammal suffering from a herpes virus infection that is mediated by endogenous host serine protease (SP) or SP-like activity, which comprises administering to said mammal a therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.
- 18. A method of inhibiting in a mammal the spread or onset of a viral infection that is mediated by endogenous host serine protease (SP) or SP-like activity, which comprises administering a therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity to a mammalian subject exposed or at risk of potential exposure to an agent of a viral infection that is mediated by endogenous host serine protease (SP) or SP-like activity.
- 19. A method of treating a patient with a deficiency of functional endogenous AAT levels and suffering from a viral infection that is mediated by endogenous host serine protease (SP) or SP-like activity, which comprises administering to such a patient a

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therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.

- 20. A method of treating an individual suffering from a viral infection that is mediated at least in part by serine protease activity, which comprises administering to such an individual a therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.
- 21. A method of preventing a deficiency of functional endogenous AAT levels in a mammalian patient susceptible to a viral infection that is mediated by endogenous host serine protease (SP) or SP-like activity, which comprises administering to such a mammalian patient a therapeutically effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.
- 22. The method of claim 21 in which the substance is (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(2-phenylethyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(2-methoxybenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(trifluoromethyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(methyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(benzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(benzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-2-(S)-Valyl-N-[1-(3-(5-(3-methoxybenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-

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Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(2,6-difluorobenzyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-styryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzyl)-L-Valyl-N-[1-(3-(5-(trans-4-difluorobenzy

- Trifluoro methylstyryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(trans-4-Methoxystyryl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(3-Thienylmethyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide; (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(Phenyl)-1,2,4-oxadiazolyl)-1,2,4-oxadiazolyl)-1,2,4-oxadiazolyl)-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4-oxadiazolyl-1,2,4
  - oxadiazolyl)carbonyl )-2-(S)-methylpropyl]-L-prolinamide; and (Benzyloxycarbonyl)-L-Valyl-N-[1-(3-(5-(3-Phenylpropyl)-1,2,4-oxadiazolyl)carbonyl)-2-(S)-Methylpropyl]-L-Prolinamide, Benzyloxycarbonyl-L-valyl-N-[1-(2-[5-(3-methylbenzyl)-1,3,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide, Benzyloxycarbonyl-L-valyl-N-[1-(2-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;
  - Benzyloxycarbonyl-L-valyl-N-[1-(2-(5-(methyl)-1,3,4-oxadiazoly]carbonyl)- 2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-N-[1-(2-(5-(3-trifluoromethylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(2-(5-(4-Dimethylamino benzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-N-[1-(2-(5-(1-napthylenyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L
    - prolinamide; (Benzyloxycarbonyl)-L-valyl-[1-(3-(5-(3,4-methylenedioxybenzyl)-1,2,4 oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-dimethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-

- methylbenzyl)-1,2,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

  (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(biphenylmethine)-1,2,4-oxadiazolyl

  ]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(4-phenylbenzyl)-1,2,4-oxadiazolyl] carbonyl)-2-(S)-methylpropyl]-L-prolinamide;

  (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-
- 2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-phenoxybenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(cyclohexylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-trifluoromethyldimethylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-
- (S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(1-napthylmethylene)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3-pyridylmethyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(3,5-diphenylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide;
- 20 (Benzyloxycarbonyl)-L-valyl-N-[1-(3-(5-(4-dimethylaminobenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]-L-prolinamide; 2-(5-[(Benzyloxycarbonyl)amino]-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)- (S)-2-

methylpropyl]acetamide; 2-(5-Amino-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(5-[(Benzyloxycarbonyl)amino]-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-

- (S)-2-methylpropyl]acetamide; 2-(5-Amino-6-oxo-2-(4-fluorophenyl)-1,6-dihydro-1-pyrimidinyl]-N-[1-(2-(5- (3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-methylpropyl]acetamide; (Pyrrole-2-carbonyl)-N-(benzyl)glycyl-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (Pyrrole-2-carbonyl)-N-(benzyl)glycyl-N-[1-(3-(5-(3-trifluoromethylbenzyl))]-1,2,4-oxadiazolyl)-
  - (S)-methylpropyl]amide; (2S,5S)-5-Amino-1,2,4,5,6,7-hexahydroazepino-[3,2,1]-indole-4-one-carbonyl -N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-(R,S)-2-methylpropyl]amide; BTD-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (R,S)-3-Amino-2-oxo-5-phenyl-1,4,-benzodiazepine-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide;
- (Benzyloxycarbonyl)-L-valyl-2-L-(2,3-dihydro-1H-indole)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; (Benzyloxycarbonyl)-L-valyl-2-L-(2,3-dihydro-1H-indole)-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; Acetyl-2-L-(2,3-dihydro-1H-indole)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]amide; 3-
- (S)-(Benzyloxycarbonyl)amino)- ε-lactam-N-[1-(2-(5-(3-methylbenzy l)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-(S)-(Amino)- ε--lactam-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide

  trifluoroacetic acid salt; 3-(S)-[(4-morpholino carbonyl-butanoyl)amino]- ε--lactam-N-[1-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl-butanoyl)amino]- ε--lactam-N-[1-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl-butanoyl-butanoyl

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(2-(5-(3-methylbenzyl)-1,3, 4-oxadiazolyl]carbonyl)-2-(R,S)-methylpropyl]acetamide; 6-[4-Fluorophenyl]- ε-lactam-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-Phenyl-4-oxothiazolidin-3-yl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-methylpropyl]acetamide; 2-(2-(R,S)-methylpropyl]acetamide; 2-(2-(R,S)-methylpropyl)-2-(S)-methylpropyl]acetamide; 2-(2-(R,S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-methylpropyl)-2-(S)-met

phenyl-4-oxothiazolidin-3-yl]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4 -

- oxadiazolyl] hydroxymethyl) 2-(S) methylpropyl] acetamide; 2-(2-(R,S)-Benzyl-4-oxothiazolidin-3-yl] N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl] carbonyl) 2-(S) methylpropyl] acetamide; 2-(2-(R,S)-Benzyl-4-oxothiazolidin-3-yl oxide] N-[1-(3-(5-(3-methylbenzyl)-1,2,4-oxadiazolyl] carbonyl) 2-(R,S,) methylpropyl] acetamide; 2-(2-(R,S)-methylpropyl] 2-(R,S,) methylpropyl] -
- (1-Benzoyl-3,8-quinazolinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; (1-Benzoyl-3,6-piperazinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; (1-Phenyl-3,6-piperazinedione)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; [(1-Phenyl-3,6-piperazinedione)-
- N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4 -oxadiazolyl]carbonyl)]-2-(S)methylpropyl]acetamide; 3-[(Benzyloxycarbonyl)amino]-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3[(Benzyloxycarbonyl)amino]-7-piperidinyl-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-(Carbomethoxy-quinolin-

2-one-N-[1-(2-(5-(3-methybenzyl)-1,3,4-oxadiazoly l]carbonyl)-2-(S)-

methylpropyl]acetamide; 3-(Amino-quinolin-2-one)-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 3-[(4-Morpholino)aceto]amino-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1, 3,4-oxadiazolyl]carbonyl)-2-(S)-

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methylpropyl]acetamide; 3,4-Dihydro-quinolin-2-one-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-(4-fluorobenzylidene) piperazine-2,5-dione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-(4-dimethylamino benzylidene)piperazine-2,5-

dione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-

- methylpropyl]acetamide; 1-Acetyl-3-(4-carbomethoxy benzylidene)piperazine-2,5-dione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Acetyl-3-[(4-pyridyl)methylene]piperazine-2,5-dione-N-[1-(2-(5-(3-methyl benzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(R)-benzyl-piperazine-2,5,-dione]-N-[1-(2-[5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-benzyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3(R)-benzylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-
- benzylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Benzyl-3-(S)-benzyl piperazine-2,5,-dione]-N-[1-(3-(5-(2-dimethylaminoethyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-Methyl-3-(R,S)-phenylpiperazine-2,5,-dione]-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-
- methylpropyl]acetamide; 4-[[-Methyl-3-(R,S)-phenyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 4-[1-(4-Morpholino ethyl)3-(R)-benzyl piperazine-2,5,-dione]-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(R,S)-Phenyl-2,4-

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imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(R)-Benzyl-2,4-imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(S)-Benzyl-2,4-imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(S)-Benzyl-2,4-imidazolidinedione-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 5-(R)-Benzyl-2,4-imidazolidinedione-N-[1-(3-(5-(3-trifluoromethylbenzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; 1-Benzyl-4-(R)-benzyl-2,5-imidazolidinedione-N-[1-(2-(5-(3-methylbenzyl)-1,3,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide; and 1-Benzyl-4-(R)-benzyl-2,5-imidazolidinedione-N-[1-(3-(5-(3-trifluoromethyl benzyl)-1,2,4-oxadiazolyl]carbonyl)-2-(S)-methylpropyl]acetamide, or mixtures thereof.

- 23. A pharmaceutical composition comprising effective amounts of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity and a pharmaceutically acceptable carrier.
- 24. The pharmaceutical composition of claim 23 in which the substance comprises AAT.
- 25. The pharmaceutical composition of claim 23 in which the substance comprises a peptide or a synthetic serpin, which exhibits AAT or AAT-like activity.
- 26. A method for the treatment of pre-existing lesions and sores of the skin or mucosa associated with a herpes virus and for prevention of future lesions and sores of the skin or mucosa associated with a herpes virus, comprising administering an effective

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amount of a topical preparation comprising a substance exhibiting mammalian AAT- or AAT-like activity.

- 27. The method of claim 26 in which said topical preparation further comprises a pharmaceutically or cosmetically acceptable carrier.
- 28. A method for treating or preventing herpes, comprising administering to a patient in need thereof an effective amount of a substance exhibiting AAT- or AAT-like activity.
- 29. The method of claim 28 in which said substance comprises AAT administered in a unit dose form having from about 50 to about 1000 mg of AAT.
- 30. The method of claim 28 in which said substance comprises a peptide selected from FVFLM (SEQ. ID NO. 1), FVFAM (SEQ. ID NO. 2), FVALM (SEQ. ID NO. 3), FVFLA (SEQ. ID NO. 4), FLVFI (SEQ. ID NO. 5), FLMII (SEQ. ID NO. 6), FLFVL (SEQ. ID NO. 7), FLFVV (SEQ. ID NO. 8), FLFLI (SEQ. ID NO. 9), FLFFI (SEQ. ID NO. 10), FLMFI (SEQ. ID NO. 11), FMLLI (SEQ. ID NO. 12), FIIMI (SEQ. ID NO. 13), FLFCI (SEQ. ID NO. 14), FLFAV (SEQ. ID NO. 15), FVYLI (SEQ. ID NO. 16), FAFLM (SEQ. ID NO. 17), AVFLM (SEQ. ID NO. 18), FCICV (SEQ. ID NO. 19), FCVCF (SEQ. ID NO. 20), FIVCV (SEQ. ID NO. 21), FCVGV (SEQ. ID NO. 22), FCVLV (SEQ. ID NO. 23), FLVGV (SEQ. ID NO. 24), FSVSV (SEQ. ID NO. 25), FSVCV (SEQ. ID NO. 26), FVCVG (SEQ. ID NO. 27), or combinations thereof.
- 31. A method of preventing sexually transmitted diseases comprising administering intravaginally or intrarectally an effective amount of a substance having AAT- or AAT-like activity or a derivative thereof capable of inhibiting caspase, proteinase-3, cathepsin G, elastase, or combinations thereof.

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32. The method of claim 31 in which the sexually transmitted viral disease is caused by a herpes virus.

- 33. A method of treating a herpes virus infection in an animal subject comprising topically administering to the subject an effective amount of one or more compounds with AAT- or AAT-like activity.
- 34. The method of claim 33 in which the said one or more compounds is present in a preparation further comprising a pharmaceutically or cosmetically acceptable carrier.
- 35. The method of claim 34 in which said preparation is in the form of a solution, lotion, ointment, or cream.
- 36. The method of claim 33 in which the herpes virus infection is caused by herpes virus type 1 or 2, varicella zoster virus, CMV, EBV, HHV-5, HHV-6, HHV-8, or combinations thereof.
- 37. The method of claim 33 which further comprises administering to the subject an effective amount of a second compound selected from anesthetics, analgesics, antibiotics, or combinations thereof.
- 38. A method of preventing or inhibiting entry of herpes viral nucleic acid into a mammalian host cell nucleus, which comprises administering to a mammalian host exposed or at risk of potential exposure to an agent harboring herpes viral nucleic acid an effective amount of a substance exhibiting mammalian alpha-1-antitrypsin (AAT) or AAT-like activity.
- 39. The method of claim 38 in which the entry of said herpes viral nucleic acid is mediated by endogenous host serine protease (SP) or SP-like activity.